

MARKOV, N.F.; ISURIN, B.I.

New fabrics manufactured by the Zheliabov Mills. Tekst.prom.  
20 no.10:12-15 0'60. (MIRA 13:11)

1. Direktor Leningradskoy fabriki imeni Zhelyabova (for Markov).
  2. Zaveduyushchiy proizvodstvom Leningradskoy fabriki imeni Zhelyabova (for Isurin).
- (Textile fabrics)

ISURINA, R.I.

Model of a plant cell. Biol. v shkole no.2:89 Mr-Ap '62.  
(MIRA 15:2)

1. Vitebskiy pedagogicheskiy institut.  
(Plant cells and tissues--Models)

SAHOVIC, K.; MARTINIS, U.; ISVANSKI, M.

Multiple reticulosarcomatosis of the skin (mycosis fungoides);  
relation to the other tumors of the reticuloendothelial system.  
Glas Srpske akad. nauka, odelj. med. no.8:1-17 1953.

1. Patoloski Institut Medicinskog fakulteta u Beogradu; primljeno  
na VII skupu Odeljenja medicinskih nauka 14 V 1953 g.  
(MYCOSIS FUNGOIDES, pathol.)  
\*

FANINGER, Aleksandar, dr.; ISVANESKI, Milerad, dr.

Cheilitis granulomatosa (Miescher) Med. prgl. 7 no.2:147-151  
1954.

1. Dermato-venereoloske odeljenje Opste bolnice Djordje Jovanovic,  
Zrenjanin; Anatomico-patoloske odeljenje Opste bolnice Djordje  
Jovanovic, Zrenjanin.

(CHEILITIS

\*granulomatous, ther., isoniazid & x-ray )

(RADIOTHERAPY, in various dis.

\*cheilitis, granulomatous, with isoniazid)

(NICOTINIC ACID ISOMERS, ther. use

\*isoniazid in granulomatous cheilitis, with x-ray)

ORESCANIN, B.; ANTIC, R.; ISVANESKI, M.

Use of electrocardiography in experimental intoxication with  
Clostridium perfringens A toxin. Acta med. iugoslavl. 14 no:4:433-  
445 '60.

1. Patofizioloski institut, Interna klinika B i Patolosko-anatomski  
institut Medicinskog fakulteta u Beogradu.  
(CLOSTRIDIUM PERFRIGENS) (ELECTROCARDIOGRAPHY)  
(TOXINS AND ANTITOXINS)

STANOJEVIC, Branislav; DURIC, Dusan S.; ISVANESKI, Milorad; MICIC, Jovan, V.

Hypertensive necrotizing arteritis of the kidney. Srpski arh. celok.  
lek. 89 no.10:1213-1216 0 '61.

1. Interna klinika A Medicinskog fakulteta Univerziteta u Beogradu  
Upravnik: prof. dr Branislav Stanojevic Institut za patolosku anatomiju  
Medicinskog fakulteta Univerziteta u Beogradu Upravnik: prof. dr  
Zivojin Ignjacev.

(HYPERTENSION RENAL case reports)

S

RASOVIC, Ljubomir; DJAJA, Vera; VUJOSEVIC, Milorad; ISVANESKI, Milorad

Pulmonary fibroma. Srpski arh. celok. lek. 90 no.6:589-598  
Je '62.

1. II hirurska klinika Medicinskog fakulteta Univerziteta u  
Beogradu Upravnik: prof. dr. Vojislav Stojanovic. Patoloski  
institut Medicinskog fakulteta Univerziteta u Beogradu  
Upravnik: prof. dr. Zivojin Ignjacev.  
(LUNG NEOPLASMS) (FIBROMA)

S

MOCIC, Mirjana; ISVANESKI, Milorad; SUVAKOVIC, Vojislav; JANKOVIC, Ivan

The Hamman-Rich syndrome - apropos of a case. Srpski arh. celok.  
lek. 91 no. 10:947-953 0'63.

1. Klinika za infektivne bolesti Medicinskog fakulteta Univerzитета u Beogradu (upravnik: prof.dr. Mihajlo Nikolic) i Institut za patolosku anatomiju Medicinskog fakulteta Univerzитета u Beogradu (upravnik: prof.dr. Zivojin Ignjacev).

S

SAVIC, Dragislav; MIHALJEVIC, Bilja; ISVANESKI, Milorad; STOJIMIROVIC, Emilija; MISROVIC, Kosta; LIPOSAVIC, Miodir.

Tonsils in tuberculosis. Srpski arh. celok. lek. 92 no.11: 1105-1108 N'64.

1. Otorinolaringoloska klinika Medicinskog fakulteta Univerzитета u Beogradu (Upravnik: prof. dr. Srećko Podvinec); Patoloski institut Medicinskog fakulteta Univerzитета u Beogradu (Upravnik: prof. dr. Zivojin Ignjacev).

RAJIC, Marko; ISVANESKI, Milorad; CVETKOV, Radojica

Dissecting aneurysm in necrosis of the media and suppurative aortitis. Med. pregl. 18 no. 5:181-184 ' 65.

1. Interno odeljenje Opste bolnice "Djordje Joanovic", Zrenjanin (Nacelnik: Prim. dr. Bosa Gruzic) i Patoloski institut Medicinskog fakulteta Univerziteta u Beogradu (Upravnik: Prof. dr. Zivojin Ignjacev).

ISVANESKI, Milorad; HADZI-ANTONOVIC, Olga; MATIC--TODOROV, Radmila

Infantile congenital amaurotic idiocy (Tay Sachs). Srpski, arh. celok. lek. 93 no.3:283-291 Mr ' 65.

1. Patoloski institut Medicinskog fakulteta Univerziteta u Beogradu (Upravnik: prof. dr. Zivojin Ignjasev); Neuropsihijatrijska klinika Medicinskog fakulteta Univerziteta u Beogradu (Upravnik: prof. dr. Uros-Jekic).

YUGOSLAVIA

LEPOSAVIC, Miomir, Dr.; ISVANESKI, Milorad, Dr.: Institute of Pathology, Faculty of Medicine, University of Belgrade (Head: IGJAJA-GEV, Zivojin, Dr.) (Patoloski institut Medicinskog fakulteta Univerziteta u Beogradu), Belgrade.

"Glucogen Storage Disease of the Heart"

Belgrade, Srpski arhiv za celokupno lekarstvo, Vol 93, No 12, 1965, pp 1103-1114

Abstract [Authors' English summary modified]: This article describes cardiomegalia glycogenica in a family where three children were affected in the first months of life. The cause of death of the children was the gradual weakening of the myocardium caused by excessive accumulation of glycogen in the muscles and by secondary respiratory infection. The characteristics of the disease are enumerated in the discussion. Pictures. 28 Western references. Manuscript received 15 Jul 65.

1/1

- 12 -

ISVORANU, E.

6  
2-JAT(NE)(MAY)  
1-BW (041)  
2

Distr: 4E2c(j)/4E3d

V Catalytic reactions with alkyl-metallic halides. IV. The alkylation of ethylbenzene with cyclohexane, with formation of mono- and dicyclohexylethylbenzene. Mircea Iovu and Elisabeta Isvoranu. *Analele Inst. "C.I. Parhon" Bucharest, Ser. Chim. Nat.* No. 21, 73-7(1969); cf. CA 53, 1181f. — Alkylaluminum halides can be catalysts for the alkylation reactions of cyclohexene (I) with ethylbenzene (II). The quantity of catalyst needed is 1 mole/100 moles olefins. The yields of alkylation products of different aromatic hydrocarbons decrease in the following order: *o*-xylene > *m*-xylene > toluene > *p*-xylene > II. The alkylation products are prepd. in the following manner: cyclohexanol is dehydrated with H<sub>2</sub>PO<sub>4</sub> to give I, m. 83°, n<sub>D</sub><sup>20</sup> 1.4466, d<sub>4</sub> 0.8098. II is prepd. by the redn. of acetophenone with Zn-Hg and HCl (Clemmensen). The catalyst is a mixt. of dibromide and sesquibromide of Al ethylate obtained from Al and EtBr: 2 Al + 3 EtBr → AlEt<sub>2</sub>Br·AlEtBr. The catalyst is prepd. in a medium of inert gas and the alkylation carried out in the same app. The app. consists of a flask with 3 openings fitted with a reflux condenser, a separating funnel, a thermometer and an inlet for CH<sub>4</sub>. CH<sub>4</sub> is first passed through an oven, half of which is filled with reduced Cu and half with FeO at 400° and then, before entering the reaction vessel, through towers of CaCl<sub>2</sub> and NaOH. After all the air has been removed, EtBr is introduced together with 1 drop of AlEt<sub>2</sub>Br·AlEtBr. Al and EtBr are used in quantities corresponding to 1 mole catalyst/100 moles I. After heating slowly about 20 min., the reaction starts; when most of the Al is consumed, the dropwise introduction of II starts. The catalyst dissolves in the hydrocarbon. The temp. is held at 70°. After all the II is added (ratio 100 moles) the calcd. amt. of I is added dropwise. The

temp. rises abruptly to 100-20°. The mixt. is then left 4 hrs. at 80-5°. The reaction product is decompd. with dil. HCl, then with H<sub>2</sub>O, dried on CaCl<sub>2</sub> and distd., first at normal pressure, then fractionally, *in vacuo*. At a 1:1 molar ratio II/I, 67.5% I and 63% II is consumed. The final products are: cyclohexylethylbenzene, a liquid, b. 96-8°/1 mm., d<sub>4</sub> 0.9263; n<sub>D</sub><sup>20</sup> 1.5218; dl(cyclohexylethylbenzene, an oily liquid, b. 163-4°/1 mm., d<sub>4</sub> 0.9672, n<sub>D</sub><sup>20</sup> 1.5360, and trl(cyclohexylethylbenzene. *Mella Pascht-Horowitz*

TR

GONTEA, Iancu; DUMITRACHE, S.; ISVORANU, Zenovia; PAMBUCCIAN, G.

Importance of proteins for resistance of the body to a toxic substance  
(phenylhydrazine). Med. intern. 13 no.11:1529-1540 N '61.

1. Lucrare efectuata la Catedrele de alimentatie si anatomie patologica,  
I.M.F. Bucuresti.

(ANEMIA, HEMOLYTIC experimental)  
(PROTEINS nutrition & diet)  
(PHENYLHYDRAZINE toxicology)

BRODSKIY, P.A.; ISYAKAYEV, V.A.

Selecting a group of pickups for formation testers on a cable.  
Nefteprom. delo. no.4:25-28 '64. (MIRA 17:6)

1. Volgo-Ural'skiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta geofizicheskikh metodov razvedki.

BRODSKIY, P.A.; ISYAKAYEV, V.A.

Comparative efficiency of boring by cumulative and bullet perforation. Razved. i prom. geofiz. no.48:108-113 '63

(MIRA 18:1)

ISYAKAYEV, V.A.

Technical and economic indices of the use of formation testers  
on a cable. Burenie no.10:34-35 '64. (MIRA 18:6)

1. Volgo-Ural'skiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta geofizicheskikh metodov razvedki.

KULAKOV, V.N.; VARFOLOMEYEV, D.F.; BONDARENKO, M.F.; KOTOVA, V.N.;  
AKHMETOV, I.G.; KOLYCHEV, V.M.; NOSAL', G.I.; KIVA, V.N.;  
PANKRATOVA, M.F.; KRUGLOV, E.A.; SHMELEV, A.S.; SHABALIN, I.I.;  
SHIRMUKHMETOV, O.A.; ISYANOV, I.Ya.; RATOVSAYA, A.A.;  
VAYSBERG, K.M.

Technology of the production of naphthalene from the refining  
products of eastern oils. Neftoper. i neftekhim. no. 4:30-33  
'64. (MIRA 17:5)

I. Nauchno-issledovatel'skiy institut neftekhimicheskikh  
proizvodstv i ordena Lenina Ufimskiy neftepererabatyvayushchiy  
zavod.

L 51309-06 ENT(m)/BPP(c) (20P(1)) Po-H/Pr-H RM

ACCESSION NR: AF5015466

UR/0318/04/000/010/0041/0044

AUTHOR: Sharipov, A.Kh.; Shirmukhametov, O.A.; Isyanov, I.Ma.

TITLE: Economic method of derivatives of phthalic anhydride from neutral petroleum distillates

SOURCE: Neftepererabotka i neftekhimiya, no. 10, 1964, 41-44

TOPIC TAGS: petroleum refining, naphthalene

Abstract: Results of investigations conducted to determine an economic method of preparation of phthalic anhydride are reported. Petroleum fractions were subjected to hydrodealkylation, to give a reaction mass containing naphthalene the main source of phthalic anhydride. Other light hydrocarbons were also obtained. Pure naphthalene isolated by distillation or crystallization is expensive and is accompanied by a considerable loss of the final product. It has been found that it is considerably more economical to isolate from the reaction mixture a heavy fraction containing about 75 percent naphthalene. The method of obtaining phthalic anhydride from naphthalene is described. The catalyst used to obtain the anhydride is...

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L 510 5-65

ACCESSION NR: AP5015466

pure naphthalene. It was further established that the cost of the preparation of phthalic anhydride increases if the fraction used contains less than 95 percent of naphthalene.

Orig. art. has 1 figure and 3 tables.

ASSOCIATION: Ufimskiy nauchno-issledovatel'skiy institut neftekhimicheskikh produktov (Ufa Scientific-Research Institute of Petro-Chemical Products)

NO. REF. 107: 115

DATE: 1963

JPRS

Card

*Jan*  
2/2

SHAFIROV, A.Kh.; SHIRUKHAMEDOV, O.A.; ISYANOV, I.Ya.

Economic method for obtaining phthalic anhydride from middle oil  
distillates. Nefteper. i neftekhim. no.10:41-44 '64.

(MIRA 17:12)

1. Ufimskiy nauchno-issledovatel'skiy institut neftekhimicheskikh  
produktov.

*Is'yanov M.*

AID P - 2653

Subject : USSR/Aeronautics  
Card 1/1 Pub. 135 - 8/17  
Author : <sup>N</sup>Is'yanov, M., Col. of the Tech. Serv.  
Title : About an obsolete formula and increasing the altitude of air photography  
Periodical : Vest. vozd. flota, 9, 49-52, S 1955  
Abstract : The relative displacements of objects on the aerial photo as depending on the speed of the aircraft, the speed of the shutter, and the focal length are discussed. The old formula is criticized and a new formula suggested.  
Institution : None  
Submitted : No date

/S. P. I. V. N. M.

AID P - 3681

Subject : USSR/Aeronautics  
Card 1/1 Pub. 135 - 8/22  
Author : Is'yanov, M. M., Col. of the Tech. Serv.  
Title : Aerial photography with perspective aerial-photo apparatus from turning aircraft  
Periodical : Vest. vozd. flota, 1, 31-35, Ja 1956  
Abstract : The author describes aerial photography during evasive maneuvers of aircraft under antiaircraft fire. He gives methods of calculation of all the elements of a turn during which aerial photography is possible. Diagrams, formulae.  
Institution : None  
Submitted : No date

Subject : USSR/Aeronautics - photography AID P - 4727  
Card 1/1 Pub. 135 - 8/23  
Author : Is'yanov, M. M., Col. of tech. service  
Title : Aerial photography during the turn by the "triple fan" method.  
Periodical : Vest. vozd. flota, <sup>39</sup>/<sub>1</sub>7, 36-41, J1 1956  
Abstract : A detailed description of how to carry out aerial photography by the "triple fan" method from a turning aircraft during the flak evasion maneuver. Five diagrams, 1 table. The article merits attention.  
Institution : None  
Submitted : No date

IS'YANOV, S. Z.

For a high quality of pork. Mias.ind.SSSR 25 no.1:52-53 '54.

(MLRA 7:3)

1. Zamestitel' upravlyayushchego Ukrainskoy respublikanskoy skoto-  
zagotovitel'noy kontoroy. (Swine--Feeding and feeding stuffs)

2.  
IS'YANOV, S.; BERENSHTEYN, A., inzhener.

Experience in feeding livestock with grain molasses. Mias. ind.  
SSSR. 25 no.5:43-44 '54. (MLRA 7:11)

1. Ukrainskaya skotosagotovitel'naya kontora (for Is'yanov)
2. Kiyevskoye otdeleniye Glavspirta (for Berenshteyn)  
(Cattle--Feeding and feeding stuffs)

IS'YANOV, S.Z.

BERENSHTEYN, A.F.; IS'YANOV, S.Z.

Use of molasses by-products for fattening cattle. Spirt.prom. 21  
no.1:31-32 '55. (MIRA 8:5)

1. Ukrainskiy likero-vodochnyy treat (for Berenshteyn). 2. Ukrzagot-  
skot (for Is'yanov)  
(Cattle--feeding and feeding stuffs)  
(Distilling industries--by-products)

**IS'YANOV, S.; PETRENKO, A., glavnyy zsetekhnik.**

**Our experience in fattening swine. Mias.ind.SSSR 26 no.5:39-41  
'55. (MLRA 9:2)**

**1.Upravlyayushchiy Kiyevskoy oblastney skotosagotvitel'noy  
kenteroy (for Is'yanov).  
(Swine--Feeding and feeding stuffs)**

ZINGER, Ye.; IS'YEMINI, I.; GOLANDSKAYA, Yu.

Testing the TPSH screw conveyer under working conditions. Muk.  
-elev. prom. 27 no.12:23-24 D '61. (MIRA 15:2)

1. Khar'kovskaya mashinoispytatel'naya stantsiya.  
(Conveying machinery)

IS'YEMINI, I., inzh.; GOLANDSKAYA, Yu., inzh.

Technological and economic indices of scraper car unloader  
Mik.-elev. prom. 28 no.12:21-22 D '62. (MIRA 16:1)

1. Khar'kovskaya mashinoispytatel'naya stantsiya.  
(Loading and unloading) (Grain--Transportation)

ISYUMOV, Ye.G. (Krasnoyarsk)

Modification of the excretion of acetone through the lungs in  
rabbits following pneumonectomy. Eksper.khir. 4 no.4:50-51  
Jl-Ag '59. (MIRA 12:11)

(PNEUMONECTOMY exper)  
(ACETONE metab)

BARYSHEVA, A.F.; VLADIMIROV, V.A.; ISYUMOVA, N.A.

Parasites of fishes in Gorkiy Reservoir during the second year  
after its filling. Trudy Inst. biol. vnutr. vod no.6:171-177  
'63.

(MIRA 18:1)

ISZKOWSKI, Jan; ROG, Stanislaw

Index numbers of industrial production. Stat szemle 42  
no.1:49-60 Ja'64.

1. Lengyel Statisztikai Fohivatal fozszalyvezeto-helyettese  
(for Iszkowski). 2. Lengyel Statisztikai Fohivatal elnokehelyettese  
(for Rog).

ISZKOWSKI, Romuald, mgr inż.

Radiation chemistry applied in industry. Chemik 16 no.3:  
82-83 Mr '63.

ISZKOWSKI, Rozuald, mgr inz.

Problems of water management. Chemik 13 no.1:1-9 Ja '65.

ISZLAI, A., correspondent

A patriotic duty. Constr Buc 15 no.697:1 18 My '63.

TISTULEASA, Florea, tehnician; SANDA, Constantin; ISZLAI, Albert

In short. Constr Buc 16 no. 738:1 29 February 1964.

HOTUPAN, Fl., correspondent; ISZLAI, Albert; CONSTANTINESCU, D., ing.;  
SANDU, S.; STAMATE, Petre; SANDA, Constantin; ROSCA, Dumitru  
ARADANU, G.

From the weekly letters. Constr Buc 16 no. 74D:4 14 March  
1964.

1. Seful laboratorului Fabricii de ciment, Medgidia (for  
Constantinescu.

ISZLAI, Adalbert; HERTANU, D., coresp.; BREZEANU, V., technician

The Front of the People's Democracy. Constr Buc 17 no.789:3  
20 F '65.

CRACIUN, Ioan, corresp.; ISZLAI, Adalbert, corresp.

Successes obtained since the beginning of the year. Constr  
Buc 17 no.793:2 20 Mr '65.

ITAKAYEVA, F. A.

COUNTRY : USSR  
 CATEGORY : Soil Science. Soil Biology. J  
 ABS. JOUR. : RZhBiol., No. 4, 1959, No. 15393  
 AUTHOR : Sizova, T.P.; Itakayeva, F.A.  
 INST. : Moscow Society for Nature Experimentation  
 TITLE : Question of the Dynamics of the Microflora of the Birch Rhizosphere.  
 ORIG. PUB. : Byul. Mosk. o-va ispyt. prirody. Otd. biol., 1956, 61, No.6, 83-93  
 ABSTRACT : The fungal flora of the rhizosphere was investigated in seedlings of the given year ("same year specimens"), and trees 3 years, 12 - 15, 40 - 50, and more than 50 years of age. The number of fungi in 1 g of soil of the rhizosphere increased with the age of the tree : in the "same year specimens" and 3-year trees it did not surpass 60 thousand, and in the rhizosphere of trees older than 40 years it consisted of ~300 thousand. Penicillium predominated (53.98%); 19.03% were Trichoderma; Alternaria,

Card: 1/2

MEL'NIKOV, N.N.; SHVETSOVA-SHILOVSKAYA, K.D.; ITALINSKAYA, T.L.

Organic insecticides-fungicides. Part 64: Interaction of triphenylphosphine with bis(dialkoxythiophosphone) disulfides, thiuram disulfide, and xanthogen disulfide. Zhur.ob.khim. 32 no.3:847-848 Mr '62. (MIRA 15:3)  
(Phosphine) (Sulfides) (Insecticides)

5.3400

S/079/60/030/04/44/080  
B001/B002

## AUTHORS:

Plate, A. F., Mel'nikov, A. A., Italinskaya, T. A.,  
Zelenko, R. A.

## TITLE:

Oxidation<sup>1</sup> of 1-Phenylcyclopentene-1 With Performic Acid and  
the Synthesis of 1-Methyl- and 1-Ethyl-2-phenylcyclopentane

## PERIODICAL:

Zhurnal obshchey khimii, 1960, Vol. 30, No. 4, pp. 1250-1255

TEXT: With reference to the papers of Refs. 1-3, and in continuation of their own papers on the synthesis of some 1,2-dialkylcyclopentanes of the composition C<sub>10</sub>-C<sub>13</sub> (Ref. 4), the authors here describe the first two members of 1-alkyl-2-phenylcyclopentane. For obtaining the synthesis of 2-phenylcyclopentanone-1, they examined the oxidation of 1-phenylcyclopentene-1 with performic acid (Refs. 5-7). The monoformate of 1-phenylcyclopentenediol-1,2 (Refs. 5-7) was obtained by oxidation of 1-phenylcyclopentene-1 with performic acid. This oxidation was made by means of 85% performic acid and hydrogen peroxide (Scheme 1). The data given in Table 1 show that the slightest rise in temperature causes a considerable reduction of the 2-phenylcyclopentanone yield (from 66% to 40%), and a

Card 1/3

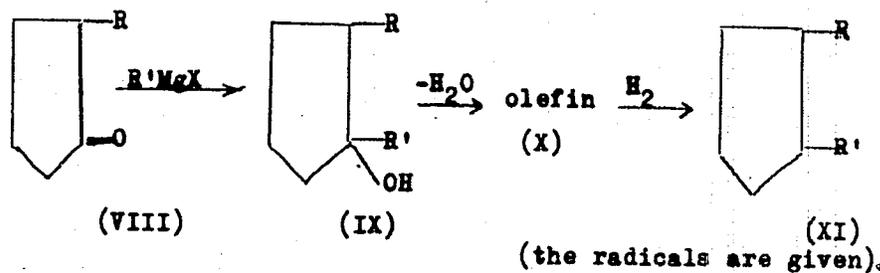
50752

Oxidation of 1-Phenylcyclopentene-1 With Performic S/079/60/030/04/44/080  
Acid and the Synthesis of 1-Methyl- and 1-Ethyl- B001/B002  
2-phenylcyclopentane

considerable increase in the yield of  $\gamma$ -benzoylbutyric acid (from 8% to 14%). A reduction of the concentration of the initial hydrogen peroxide to 19% (experiment No. 3), and a reduced temperature ( $23^{\circ}$  -  $24^{\circ}$ ) cause a much lower ketone yield (29%). The yield of keto acid remains high, probably due to the further oxidation of the newly developed ketone. Approximately 30% of non-reacting hydrocarbon remains in the reaction mass. Under such comparatively easy conditions, neither glycol and its monoformate, nor the  $\alpha$ -oxide were separated. The monoformate of glycol which developed, was converted into 2-phenylcyclopentanone-1 (Scheme 2) in a strongly acid medium ( $H_2SO_4$ ). In this process, the proton was added to carbinol oxygen under the formation of cation (V), and thence, the tautomeric cation (VI) developed. A decomposition of (VI) also takes place, and formic acid and the carbonium ion (VII) develop. The latter is rearranged into 2-phenylcyclopentanone-1 (VIII a). The newly obtained 1-methyl- and 1-ethyl-2-phenylcyclopentane was synthesized according to scheme 3;

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Oxidation of 1-Phenylcyclopentene-1 With Performic S/079/60/030/04/44/080  
 Acid and the Synthesis of 1-Methyl- and 1-Ethyl- B001/B002  
 2-phenylcyclopentane



The constants of the synthesized hydrocarbons are given in Table 2. Under the above conditions the oxidation of 2-phenylcyclopentanone-1 only yielded  $\gamma$ -benzoylbutyric acid. There are 2 tables and 23 references, 9 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: April 3, 1959

Card 3/3

KOTLYAREVSKIY, L.I.; NEGOVSKIY, V.A.; ITAL'YANTSEVA, T.Ya.; LYUBIMKINA, K.N.

Some mechanisms of the activity of the higher sections of the central nervous system in dogs after heavy exsanguination. Trudy Inst. vys. nerv. deiat. Ser. patofiziol. no.9:73-82 '61. (MIRA 15:4)  
(RESUSCITATION) (CONDITIONED RESPONSE)

MANOLOV, S.; PENEV, D.; ITCHEV, K. [Ichev, K.]

Multiple innervation of muscular fibers of musculus vocalis  
in cats. Doklady BAN 16 no. 8: 849-852 '63.

1. Note presentee par D. Kadanoff [Kadanov, D.].

Endocrinology

BULGARIA

ITCHEV, K. [Affiliation not given]

"Transformations of the Structure of the Vascular System of the Thyroid of Dogs after Resection"

Sofia, Doklady Bolgarskoy Akademii Nauk, Vol 19, No 4, 1966, pp 329-332

Abstract: [French article] In spite of generally good results of surgical treatment of Basedow's disease, the number of postoperative relapse is still quite high (0.9 to 18.7%). Consequently, the author studied in 18 dogs the transformation of the structure of the gland after removing 3.4 of the thyroid without preliminary tying of the arteries. Subsequently, the animals were killed at various intervals after the operation and the blood vessels studied in the form of histological preparations. Results seem to indicate that the increased blood circulation in the remaining part of the gland points to its more intensified function. A discussion of the possible meaning of the findings, illustrated by 4 figures (covering the period from 7 days to 9 months after the operation), is also given. There are 5 Soviet and 4 Western references. (Manuscript received, 11 Jan 66.)

OTROSHCHENKO, O.S.; SADYKOV, A.S.; ~~ITEBAYEV, M.U.~~; ISAMETOVA, A.I.

Syntheses based on anabasine. Part 16: Reactions of  
N-oxides of N-methylanabasine with methyl magnesium iodide.  
Zhur.ob.khim. 33 no.3:1038-1040 Mr '63. (MIRA 16:3)

1. Tashkentskiy gosudarstvennyy universitet imeni  
V.I. Lenina.

(Anabasine)  
(Magnesium compounds)

SMITHSON, A. G.

Encephalocele

Casuistics of intranasal cerebral hernia. Vest. oto-rin. 14 No. 3 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

ITEL'MAN, G.P.

Sling with self-reversing suspension. Mashinostroenie no.6:  
73-74 N-D '63. (MIRA 16:12)

1.2500  
18.1285

89423  
S/136/61/000/002/004/006  
E073/E235

**AUTHOR:** Itel'son, G. M.

**TITLE:** Welded Titanium Pumps

**PERIODICAL:** Tsvetnyye metally, 1961, No. 2, pp. 74-78

**TEXT:** In certain metallurgical processes carried out in Russia, various solutions, with pH-values of from 1.5 to 5.0, have to be used. These solutions, which have specific gravities of from 1.10 to 1.25 and are held at temperatures between 30 and 85°C, include sulphates and chlorides of nickel, copper, cobalt, iron, and sodium, containing from 0.5 to 15 grams/litre of free sulphuric acid, from 35 to 48 grams/litre of chlorine ions, and up to 1 gram/litre of copper. As a result of corrosive attack by these solutions, pumps fabricated from the steel X18H12M3T. (Kh18N12M3T) became virtually unserviceable after a few days of operation, while pumps manufactured from high-silicon castings proved to be unsuitable for this application because of the excessive brittleness of their essential components. Castings made of a steel containing 18% chromium and 25% nickel gave more satisfactory results but, even in this case, the service life of components made of this steel did not exceed an average of three months and, with the more  
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IX

### Welded Titanium Pumps

aggressive solutions, was limited to only a few weeks. To overcome these difficulties, the production of corrosion-resistant pumps made of welded titanium was proposed in 1959 by D. K. Kalganov, V. B. Zhilkin, N. P. Rabinovich and the author of this paper. A titanium alloy with an ultimate tensile strength of from 45 to 60 kg/mm<sup>2</sup>, a yield point of from 38 to 50 kg/mm<sup>2</sup>, an elongation of not less than 25%, a reduction of area of 50%, and a specific gravity of 4.5 was used. This alloy is eminently suitable for forging and pressing in the hot state, and components of uncomplicated shapes can also be pressed in the cold state. The alloy welds satisfactorily in an atmosphere of argon or helium, or in a mixture of both gases, and the strength of the welded joints produced amounts to not less than 90% of that of the parent metal, while the corrosion resistance of the alloy to the solutions used in these metallurgical processes is, without exception, high. In view of the high chemical activity of titanium in the molten state, it must be melted in a vacuum furnace. In this connection, it is necessary to bear in mind that the process of turning out titanium castings, even of medium weight, is very complicated technically,  
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### Welded Titanium Pumps

and insufficient is known about it. On the other hand, the fabrication of titanium pumps from pressings costs less, because the titanium components of a welded pump, such as the volute casing and impeller, are from about 40 to 50% lighter than the same parts cast in titanium; furthermore, the higher quality of the internal working surfaces of the pump fabricated from welded pressings of titanium alloy enables hydraulic losses resulting from liquid friction to be reduced considerably. Titanium pumps, with capacities of 30 m<sup>3</sup>/hr and 200 m<sup>3</sup>/hr against a head of 30 metres, have been designed and are already in operation. In addition, a titanium pump, with a capacity of 400 m<sup>3</sup>/hr has been constructed and is at present undergoing tests. A longitudinal section of a 200-m<sup>3</sup>/hr pump is shown in Fig. 2. In this pump, the volute chamber of the casing (10) is made up of two symmetrical halves pressed from the titanium-alloy plate and welded together. The discharge branch (1), which is welded to the volute chamber and which terminates in a welded-on flange, either forged or machined from titanium-alloy plate, is also made up of two halves pressed from titanium-alloy plate and welded together. A tongue, pressed from titanium, Card 3/11

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#### Welded Titanium Pumps

ensures the necessary reduction in the clearance between the impeller (15) and the volute, and is welded inside the volute casing at the boundary with the discharge branch (1). On the inlet side, a flange, made from titanium plate or machined from a titanium forging, is welded to the volute casing and is provided with threaded holes for securing the titanium cover (11). A titanium ring (2), with provision for mounting the casing on the housing, and another titanium ring (3), forming part of the stuffing-box, are welded to the opposite side of the volute casing (10). Lugs, with threaded holes for studs to secure the casing to the pump housing, are welded to the ring (2). The pump cover (11) is machined from a titanium forging and is fitted with a welded-on flange made from titanium plate or a forging, this flange serving to secure the cover to the flange of the volute casing (10). A special plastics sealing ring (14) is fitted in a recess in the cover (11), closing the gap between the eye of the impeller (15) and the cover and guarding against the possibility of undesirable metal-to-metal friction. The cover (11) is fitted with stud (12) for fixing the inlet branch (13), which is normally

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**Welded Titanium Pumps**

welded from titanium plate, and another flange is provided to join it to the pipeline. The impeller (15), which has vanes of double curvature, is of welded construction and is made from rolled and forged titanium, subjected to the necessary machining operations. The impeller consists of pressed front and rear shrouds, a hub, and pressed impeller and balancing vanes, the impeller vanes being welded to the rear shroud over the full extent of the joint, while the front shroud is fixed only to the vanes at the points accessible for welding. The hub of the impeller is provided with a hole and a keyway for mounting on the steel shaft (5), which is protected from attack by corrosive media by a welded titanium sleeve (6) and a titanium cap (16). The shaft (5) runs in two ball bearings in the cast-iron housing (7), the cover of the ball bearing on the stuffing-box side being protected against corrosive attack by a titanium splash-ring (8). The stuffing-box packing (4) consists of graphited asbestos, which gives satisfactory performance in conjunction with titanium. Any corrosive liquid which may leak past the stuffing-box packing drops into a sump (9),

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**Welded Titanium Pumps**

from which it is drained off. Fig. 3 shows a cross-section of the die (1) and matrix (4) used for producing one half of the volute casing of this pump. On account of the appreciable depth of the titanium pressing (2), the die is provided with a special clamping ring (3). The volute casings of the first experimental titanium-alloy pumps were pressed from plate of 6 mm thickness, but there now appears to be no doubt that the production of high-quality titanium pumps with capacities of 200 m<sup>3</sup>/hr, using casings pressed from 5 mm plate, is quite feasible, and, in fact, the possibility of using plate of only 3 mm in thickness is being examined. Sections for the volute casing are pressed at a temperature of 350°C, and any scale is removed mechanically. To remove internal stresses after welding together the two halves, the casing is heated to about 550°C in an electric furnace and is held at this temperature for 45 min. A cross-section of the dies used to press the front and rear shrouds of the impeller is shown in Fig. 4. Since the plate is deformed comparatively little when pressing the rear shroud (Fig. 4a), the design of the dies does not include a clamping ring for the plate, whereas this is essential when

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### Welded Titanium Pumps

pressing the front shroud (Fig. 4b). The components of the titanium pump are fabricated by simple manual argon-arc welding equipment, using a non-consumable tungsten electrode with a titanium degassing wire. During welding, the entire welding zone, i.e., the electrode, the welding arc, the weld pool, and the degassing wire, must be shielded in argon. It is also necessary to protect the face and the reverse sides of the part being welded by means of argon in the temperature zone above 400°C. The welding arc is set up by a d.c. generator with straight polarity, the tungsten electrode constituting the negative pole. In place of manual equipment, semi-automatic equipment, using a mixture of helium and argon in the proportion of 3 : 1, is also practicable under certain conditions. In March 1960, two titanium pumps, each with a capacity of 200 m<sup>3</sup>/hr, were commissioned for duty on these metallurgical processes for the first time, and operated under the most arduous conditions. Two further pumps with an identical performance were put into service shortly afterwards, and in July two more titanium pumps began handling corrosive industrial liquids. The results obtained were outstanding, the pumps

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**Welded Titanium Pumps**

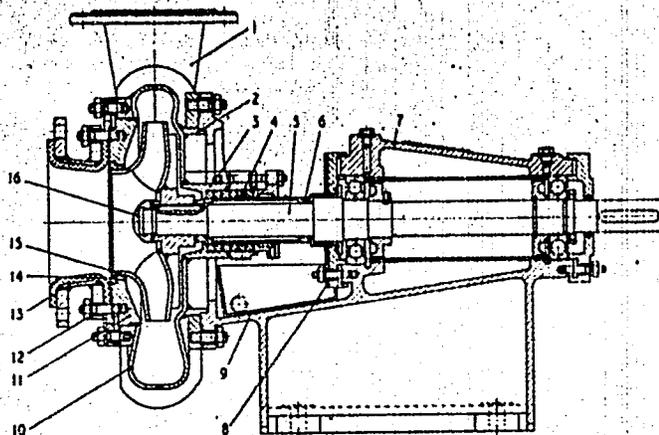
delivering the required quantities of process media without breakdown. Even more important, after six months of continuous operation they were not only still serviceable, despite the aggressive liquids handled, but showed no signs of corrosion whatsoever and no mechanical wear. There are 4 figures. ✓

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Welded Titanium Pumps

Fig. 2



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Welded Titanium Pumps

Fig. 3

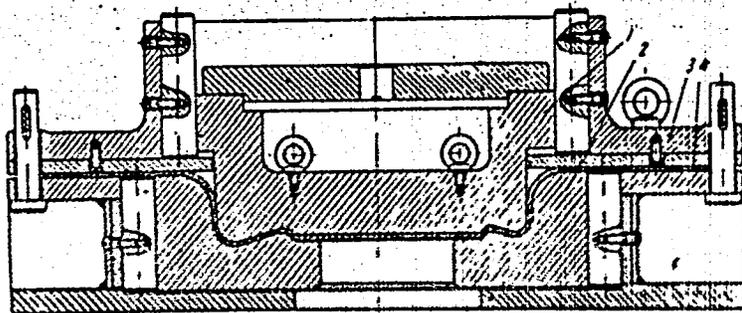


Рис. 3. Конструкция штампа для получения половины спиральной камеры

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Welded Titanium Pumps

Fig. 4

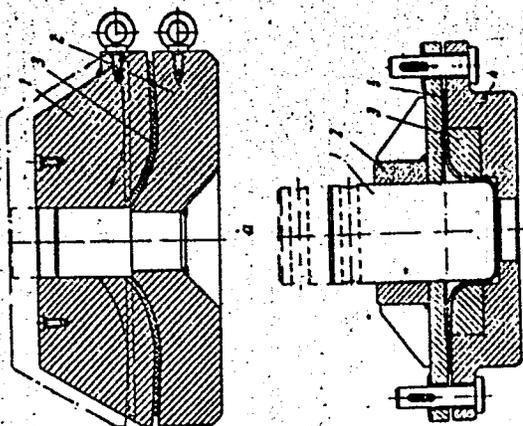


Рис. 4. Конструкция штампа для изготов-  
ления дисков рабочего колеса:  
а — заднего диска; б — переднего диска

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ZHILKIN, V.B.; Primalni uchastiye: ITEL'SON, G.M.; KALGANOV, D.K.;  
KADOBNOV, V.D.; OLEJNIKOV, I.S.; SMIRNOV, V.I.; BLYUMENFEL'D,  
M.K.; KONYASHIN, Ye.I.; LASKIN, R.L.

Experimental use of titanium in hydrometallurgy. Titan i ego  
splavy no.8:273-278 '62. (MIRA 16:1)  
(Hydrometallurgy--Equipment and supplies)  
(Titanium--Corrosion)

AM4016852

BOOK EXPLOITATION

S/

IteI'son, Genrikh Maksovich; Zhilkin, Vladimir Borisovich

Titanium equipment in the production of nickel (Titanovoye oborudovaniye v proizvodstve nikelya), Murmansk, Murmanskoye knizhnoye izd-vo, 1963, 124 p., illus., biblio., 2,000 copies printed.

TOPIC TAGS: titanium alloy, nickel, corrosion, corrosion resistance, VT-1, VT-4, OT4, VT5-1, stainless steel, pump, tubing, valve, metal working

PURPOSE AND COVERAGE: The development and creation of new progressive equipment that can be mechanized and automated is one of the conditions for an increase in the productivity of labor and fulfillment of the tasks of the Seven-Year Plan for nonferrous metal production. Titanium alloys, distinguished by their high corrosion resistance, have a great future as materials for such equipment. This book attempts to systematize the experience gained in studying the corrosion resistance of titanium alloys, the design, and the fabrication of titanium equipment at the "Severonikel" Combine. Chapters I, II, III, and VI were written by engineer V. B. Zhilkin and chapters IV, V, VII, VIII, IX, and X were written by engineer G. M. IteI'son.

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AM4016852

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DATE ACQ: 17 Jan 64

NR REF SOV: 28

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L 31817-65 EWI(m)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)

PI-4 IJP(c) JD/  
S/ HM/HM

ACCESSION NR AM5002514

BOOK EXPLOITATION

38  
87

Itel'son, G. K.

Titanium equipment (Titanovoye oborudovaniye), Moscow, Izd-vo "Mashinostroyeniye",  
1964, 146 p. illus., biblio. Errata slip inserted. 2,500 copies printed.

TOPIC TAGS: titanium, machining, pressure working, welding, soldering,  
antifriction property, pump, armature

PURPOSE AND COVERAGE: This book presents basic information on various types of  
working of commercial titanium. The various equipment made from commercial  
titanium is discussed. The economic advisability, prospects, and basic directions  
in the expanded production of equipment from titanium are indicated. The book  
is intended for engineers and technicians of plants of various branches of  
industry.

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SUBMITTED: 20 May 64

SUB CODE: M1

NO REF SOV: 044

OTHER: Q10

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ITEL'MAN, G.P., inzh.

New S-867 construction lift. Stroi. i dor.mash. 9 no.10:15

0 '64.

(MIRA 18:1)

AUTHOR: Itel'son, L. SOV-4-58-8-17/25

TITLE: The Riddle of Gas Condensates (Zagadka gazokondensata)

PERIODICAL: Znaniye-sila, 1958, Nr 8 pp 19-21 (USSR)

ABSTRACT: Under high pressure, separate fluid basic components of underground oil are transformed into gas; the more the pressure grows, the more oil components turn into gaseous conditions. However, if gas condensates appear on the surface of the earth and the pressure has ceased, then the gaseous parts are retransformed into fluid, i.e. they condense. At present, one of the most renowned Soviet oil experts - Professor M.Kh. Shakhnazarov, along with Engineer Z.N. Rabinovich, is studying the mysterious laws of retrograde condensation. In 1952, on the **Apsheon** peninsula where exploitation has already begun, huge deposits of gas condensate were discovered. There are 4 drawings.

1. Petroleum--Vaporization 2. Gases--Condensation

Card 1/1

AUTHORS: IteI'son, L., Candidate of Technical Sciences, Karasik, G., Engineer, Baku SOV/29-58-10-3/28

TITLE: Planetary-Drilling (Planetarnoye bureniye)

PERIODICAL: Tekhnika molodezhi, 1958, Nr 10, pp 4 - 4 , 29 - 29 (USSR)

ABSTRACT: The Collective of the Azerbaydzhanskiy institut neftyanogo mashinostroyeniya (Institute of Petroleum Machine Building, Azerbaydzhan) started to work out a new so-called planetary-drilling method which was suggested by A.S. Artyumov. After a long time of investigations the scientists succeeded in developing such a method and in finding a suitable device for it. This device is very simple: The big chisel which rotates about its own axis and about the axis of the borehole was replaced by two smaller chisels. The axes of rotation of the chisels are in parallel position, the center of the borehole is between them. Both chisels rotate simultaneously and with the same speed. This device has an outstanding property: As soon as the chisels start rotating thanks to the reactive force also the entire system starts to rotate

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Planetary-Drilling

SOV/29-58-10-3/28

about the axis of the borehole. As the chisels operate as in a planetary gear, about this, designation was adopted for about center of this system. In the course of experiments in the works "Stalinneft'" in Baku it was found that planetary drilling to a diameter of the same size reduces the power consumption by a factor of 2,7 with electric drive and by a factor of 3,5 with turbine drive. Vibrations of the chisel which are detrimental for the equipment are reduced; this fact is of great importance in the case of especially deep drilling. The planetary drilling method can be used in hard and soft soil in the drilling for petroleum and gas as well as in the sinking of shafts. This method was realized in the combine due to Gumennik and in the panel-controlled sinking (prokhodcheskiy) combine for horizontal shafts in hard and solid rock. This method was also successfully applied to the panel-controlled sinking machine which was developed by the collective of the construction bureau of the Leningradskiy metrostroy (Leningrad Subway construction), but . it is not possible to foretell all the applications of this method. There are 2

Card 2/ 2

ITEL'SON, L., kand.ped.nauk; KARASIK, G., inzh.

Taming the griffon. Znan. sila 33 no.3:5-7 Mr '58.

(MIRA 11:4)

(Baku Archipelago--Oil well drilling, Submarine)

S/029/60/000/06/02/020  
B008/B007AUTHOR: Itel'son, L., Candidate of Pedagogical Sciences (Baku)TITLE: Raw Material From the Rocket NozzlePERIODICAL: Tekhnika molodezhi, 1960, No. 6, pp. 4, 6-7

TEXT: Here the author deals with acetylene, its properties, compounds, derivatives, and the possibilities of its application (Fig.: colored insert). In the field of the development of the chemistry of acetylene he mentions some names of Russian - M. G. Kucherov and A. Ye. Favorskiy - and Soviet chemists - I. N. Nazarov, Academician N. D. Zelinskiy, and Academician B. A. Kazanskiy. In spite of the numerous and manifold possibilities offered by acetylene for many years, they have, for the greater part, not been utilized on account of the difficulty and expense of acetylene production. Only after investigating the processes occurring in the interior of rockets, chemists discovered new ways of synthesizing this promising substance. Recently, various methods of thermally synthesizing acetylene from natural gases have been developed. Though the production of acetylene from natural gases by means of thermochemical reactions in a gas jet flowing out with high velocity is still in its initial stages, it

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Card 2/2

ITEL'SON, L.B.. kand.ped.usuk

Some urgent practical questions concerning technical education.  
Politekh. obuch. no.9:9-11 S '58. (MIRA 11:10)  
(Vocational education)

ITEL'SON, L.B., kand.ped.nauk

From the experience of students' industrial training. Politekh.obuch.  
no.2:20-24 F '59. (MIRA 12:3)  
(Baku--Vocational education)

ITELSON, L.B. [Itelson, L.B.] (Szovjetunio)

On "engineering psychology." Term tud kozl 5 no.7:299-301 JI '61.

ITEL'SON, L.B.

Peculiarities in the formation of self-control during industrial training. Vop.psikhol. 7 no.2:5-16 Mr-Ap '61. (MIRA 14:6)

1. Kafedra pedagogiki i psikhologii Azerbaydzhanskogo pedagogicheskogo instituta imeni M.F.Akhundova, Baku.

(Manual training—Psychological aspects) (Self-control)

ITEL'SON, L.B.

Psychological characteristics of an operator's work in continuous  
chemical production. Vop. psikhol. 7 no.5:109-120 S-O '61.  
(MIRA 15:1)

1. Azerbaydzhanskiy pedagogicheskiy institut imeni M.F.Akhundova,  
Baku.

(WORK PSYCHOLOGICAL ASPECTS)

ITENBERG, A.M. PROGRESS AND PROPERTIES INDEX 10

CA

Production of o nitrophenol from o nitrochlorobenzene  
 V.O. Lukashovich and A.M. Itenberg. Anilinskrazochnaya Prom.  
 6, 28-9(1955).- A yield of 96% o-HOC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub> (I), m. 42-3° was  
 obtained by digesting 316 parts of pure o-ClC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub> with 5600  
 parts by wt. of 5% NaOH in an Fe autoclave at 160° for 9 hrs.  
 p-ClC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>, treated similarly for 12 hrs., produced good  
 yields of p-HOC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub> (II). By working with NaOH of higher  
 concn., the brevity of the reactions and the yields are re-  
 duced. By introducing metallic Cu or by working in Cu auto-  
 claves, the yields of I and II are decreased chiefly by the  
 decompn. of the nitrophenols. Chas. Blanc

COMMON ELEMENTS

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ST AND 120 ORDERS

140 AND 174 ORDERS

PROCESSES AND PROPERTIES INDEX

**TENBERG, A.M.**

*ca*

The synthesis of triethylvinylsilicane. S. N. Ushakov and A. M. Tenberg. *J. Gen. Chem.* (U. S. S. R.) 7, 2405-6 (1937). When  $\text{Et}_3\text{SiCl}$  is chlorinated in the cold in the presence of 1-3%  $\text{PCl}_5$  with 50% of the calcd. wt. of Cl has been taken up, 75% of a mixt. of  $\alpha$ -chloroethyltriethylsilicane,  $b_p$  72-3°,  $d_4^{20}$  0.0143,  $n_D^{20}$  1.4334, and its  $\beta$ -isomer,  $b_p$  80-2°,  $d_4^{20}$  0.0168,  $n_D^{20}$  1.4503, is obtained. The  $\beta$ -compd. easily loses Cl with alc. NaOH, but the  $\alpha$ -form must be heated to 145° with NaOH in a sealed tube before it gives triethylvinylsilicane,  $b_p$  140°,  $d_4^{20}$  0.7767,  $n_D^{20}$  1.4330,  $M. R.$  63.23. This compd. does not polymerize, even in the presence of  $\text{B}_2\text{O}_3$  or  $\text{H}_2\text{SO}_4$ . H. M. Leicester

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

COMMON SUBJECTS INDEX

COMMON SUBJECTS INDEX

COMMON SUBJECTS INDEX

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CA  
ITENBERG, A.M.

The synthesis of polyvinyl acetal. S. N. Ushakov and A. M. Itenberg. *J. Applied Chem.* (U. S. S. R.) 12, 102 (1939) (French; N66) (1939).—A soln. (1:1) of polyvinyl acetate in EtOAc was mixed with EtOH (1 or 2 mols. per mol. of polyvinyl acetate) and HCl (catalyst) and heated until a ppt. was formed. Addn. of parakichyte (2 mols. per mol. of vinyl acetate) dissolved the ppt. and the reaction mixt. was heated for approx. 10 hrs. Then, the mixt. was neutralized with bicarbonate, a large amt. of NaCl was added, and the mixt. evapd. to dryness. The residue was washed with water first by decantation, then on the filter to remove NaCl. The polyvinyl acetal, dried at 90-100°, m. 135-40°, fluidity (Raufig) 189, water absorption 0.73%, hardness (Brinell) 21.6, (Shore) 70. A. A. Polgorny

AS 6-35.4 METALLURGICAL LITERATURE CLASSIFICATION

ITENBERG, A. M.

"Investigations in the field of High Molecular Weight Polymers. I. On Methylene-Malonic Ester and its Polymers." Vansheidt, A. A., Itenberg, A. M. and Pazi, M. N. (p. 574)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1945, Volume 15, no. 6.

ITENBERT, A. N.

"The Operation of an Installation for the Demineralization of Water by Means of Ion-Exchange Resins," an article included in the book "The Theory and Practice of the Application of Ion-Exchange Agents," edited by K. V. Chmukov and published by AS USSR, 1955, 164 pp.

ITENBERG, A.M.

At the Central Laboratory of the Novosibirsk Chemical Plant. Zav.lab  
26 no.10:1183 '60, (MIRA 13:10)

1. Nachal'nik Tsentral'noy laboratorii Novosibirskogo khimicheskogo  
zavoda.  
(Novosibirsk—Chemical engineering laboratories)

ITENBERG, B. A.

Spatial and Plane Problems of the Theory of Elasticity

Dissertation: "Stressed State of Disks Weakened by Round Holes." Cand Tech Sci, All-Union Sci Res Inst of Hydraulic Engineering, Leningrad, 1953. (Referativnyy Zhurnal -- Mekhanika Moscow, Mar 54)

SO: SUM 213, 20 Sep 1954

*Itenberg, Boris Samuilovich*

ITENBERG, BORIS SAMUIL'OVICH

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Aleksandr Ul'yanov, 1866-1987, by B. S. Itenberg I A. Ya. Chernyak. Moskva,  
Gospolitizdat, 1957.  
70 p. Illus., Ports.

VAYNBERG, D.V. (Kiyev); ZARUTSKIY, V.A. [Zaruts'kiy, V.O.] (Kiyev);  
ITENBERG, B.Z. (Kiyev)

Stressed state of cylindrical shells reinforced with ribs. *Prykl.*  
*mekh.* 6 no.4:375-384 '60. (MIRA 13:11)

1. Institut stroitel'noy mekhaniki AN USSR.  
(Elastic plates and shells)

16.7300

S/021/60/000/006/006/019  
A153/A029

AUTHORS: Vaynberg, D.V.; Itenberg, B.Z.

TITLE: Asymmetrical Deformation of Constructive-Orthotropic Shells

PERIODICAL: <sup>no</sup> Dopovidi Akademiyi nauk Ukrayins'koyi RSR, 1960, Nr. 6, pp. 761 - 765

TEXT: The authors present a purely mathematical method for the investigation of asymmetrical deformation of shells of rotation, reinforced by a sufficiently dense network of orthogonal ribs along the lines of principal curvatures. Such a spatial construction, allowing for the shearing strains, is regarded as a constructive-orthotropic shell. A system of equations is presented for the solution of asymmetrical deformations of the above-specified shells (14 - 16), which are further developed for the case of the above-mentioned deformations when an extraneous surface load is absent (18 - 21). An example of the boundary effect of a cylindrical constructive-orthotropic shell is discussed. Figure 1 shows the magnitudes of sagging and forces instrumental in the creation of the boundary effect. There is 1 figure.

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S/021/60/000/006/006/019  
A153/A029

Asymmetrical Deformation of Constructive-Orthotropic Shells

ASSOCIATION: Instytut mekhaniky AN UkrSSR (Institute of Mechanics of the AS  
UkrSSR)

PRESENTED: by F.P. Byelyankin, Academician, AS UkrSSR

SUBMITTED: July 6, 1959

Card 2/2

VAYNBERG, D.V., doktor tekhn. nauk; ITENBERG, B.Z., kand. tekhn. nauk

Stressed state of multiconnected plates with regular configuration. Rasch. na prochn. no.9:133-172 '63 (MIRA 16:12)

ACCESSION NR: AP4006582

S/0021/63/000/004/0457/0462

AUTHOR: Vaynberg, D. V.; Itenberg, B. Z.

TITLE: Stiffened cylindrical shell under discrete forces on faces

SOURCE: AN UkrRSR. Dopovidi, no. 4, 1963, 457-462

TOPIC TAGS: stiffened cylindrical shell, stringer stiffened cylindrical shell, end stiffening ring, structurally orthotropic shell, axial face forces

ABSTRACT: The authors consider the problem of a cylindrical ribbed shell, the end face of which is reinforced with a rigid ring, to which discrete forces and moments are applied, or loads distributed along various areas of the end face of the shell.

A system of basic resolving differential equations was obtained for the displacement problem on the basis of a model of a constructively orthotropic shell. A numerical investigation of some cases was carried out.

ASSOCIATION: Ky'yivs'ky'y Inzhanerno-Budivel'ny'y Insty'tut (Kiev Construction Engineering Institute)

SUBMITTED: 16Apr61

DATE ACO: 03May63  
NO REF SOV: 002

ENCL: 00  
OTHER: 000

SUB CODE: AP  
Cats 1/1

ITENBERG, D. S.

ITENBERG, D. S. and GRISHIN, V. Ya. "Rotary stations with SNL and SGL type operation",  
Elektrosila, No. 5, 1948, p. 54-57.

SO: U-3042, 11 March 53, (Lepotis 'Zhurnal 'nykh Statey, No.7 1949).

AUTHORS: Bron, O. B., Professor, Doctor of Technical Sciences, Itenberg, D. S., Engineer (Leningrad) SOV/105-58-10-15/28

TITLE: Problems in Liquid Cooling of Electrical Apparatus  
(Problemy zhidkostnogo okhlazhdeniya elektricheskikh apparatov)

PERIODICAL: Elektrichestvo, 1958, Nr 10, pp 65 - 70 (USSR)

ABSTRACT: This is a presentation of experience gained in the "Elektrosila" Works. This experience is to the point that when comparing water cooling with air blast cooling the objections (Ref 1) raised against water cooling do not prove to be plausible. It is further demonstrated that the use of chemically pure water reduced leakage current to an insignificantly low level, which also is a fact speaking in favor of the use of water as a coolant. This is a description of high-frequency contactors and of automatic switchgears with water cooling. By employing hollow current carrying parts cooled by flowing water it was possible to reduce the dimensions and the consumption of non-ferrous

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Problems in Liquid Cooling of Electrical Apparatus

SOV/105-58-10-15/28

metal. Water cooling of the stationary main contacts effects an increase of the current ratings. A noticeable feature of this system of automatic contactors is the circumstance that not only the apparatus itself but also the bus bars are water-cooled. Water cooling is highly effective in particular in group installations consisting of a number of contactors. There are 5 figures, 1 table, and 5 references, 4 of which are Soviet.

SUBMITTED: January 30, 1958

Card 2/2

ZEYLINGER, F.A., inzh. (g.Lugansk); ITENBERG, I.D., inzh. (g.Lugansk)

Remote control of compressor plants. Ugol' 35 no.1:23-25  
Ja '60. (Compressors) (Remote control) (MIRA 13:5)

AFANAS'YEV, V.A.; ITENBERG, I.I.; KAZAIS, E.B.; SMELKOV, V.A.

Network for program interruption. Avtom. i prib. no.1:  
40-43 Ja-Mr '65. (MIRA 18:8)

L 39965-65 EEC-4/RED-2/EEC(k)-2/EWT(d)/EWP(k)/EWP(h)/EEC(1)/T/EWP(1)/EWP(v)  
PT-4/Pg-4/Pk-4/PL-4/Pn-4/Pn-4/Pq-4 IJP(c) GG/BB/GS  
S/0000/64/000/000/0230/0236

ACCESSION NR: AT5003947

AUTHOR: Itenberg, I. I.

TITLE: MPPI-1 machine for centralized control and primary processing of information

53  
B+1

SOURCE: Nauchno-tekhnicheskoye obshchestvo priborostoitel'noy promyshlennosti, Nauchno-tekhnicheskoye soveshchaniye. 3d, Moscow, 1962. Vychislitel'naya tekhnika dlya avtomatizatsii proizvodstva (Computer technology for the automation of production); trudy soveshchaniya. Moscow, Izd-vo Mashinostroyeniya, 1964, 230-236

TOPIC TAGS: data processing machine, centralized control computer, computer control/ MPPI-1, AMP-1

ABSTRACT: The main functions of the described apparatus, developed at the Leningrad branch of Institut avtomatiki (Institute of Automation), are centralized automatic gathering, primary processing, and recording of information concerning the state of some production process. The author claims that few of the existing data-gathering devices can be used for analysis and optimization of the production process as well. The MPPI-1 can be used as part of the operative control system

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ACCESSION NR: AT5003947

of a complex plant, or as an independent centralized control unit. It gathers the information by programmed reading of pickups, performs mathematical operations on the running values of the parameters (including averaging, normalization, comparison with set points, integration, smoothing, and economical calculations), records the output, signals the presence of faults, and feeds the information to other units. It consists of a computer and printer unit, a group-converter and multipoint-recorder unit, a control panel, a signal normalization unit, and a power supply. It can handle data on 128 parameters in analog form or on 72 parameters in two-position or integral form. The computer is digital, and its operating and static memories have capacities of 512 and 4096 26-bit words, respectively. The technical specifications and features of the various units are described. Readout is by means of an automatic printer with AMP-1 printing wheel, the characteristics of which are also described. Advantages claimed for the MPPI-1 are flexibility, high capacity at low cost, reliability resulting from the use of ferrite cores and germanium diodes, simplicity of logical structure, and use of standard parts. Orig. art. has 2 figures.

ASSOCIATION: None

Card 2/3

*Submitted: 1 Sept 67*

ITENBERG, I.M., red. atlas; BOYKOVA, N.S., red. kart; KOLOSOVA, L.N., red. kart; SEMENOVA, V.D., red. kart; SMIRNOVA, T.N., red. kart; BUKHANOVA, A.V., tekhn. red.; KUZNETSOVA, O.L., tekhn. red.; SKALICHEV, A.T., tekhn. red.

[World atlas] Atlas mira. Moskva, 1961. 165 p. of col. maps (part fold.), 128 p. (MIRA 14:10)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.

(Atlases)

LEVINSON, V.B., inzh.; TAUBIN, M.G., inzh.; ITENBERG, S.M., inzh.

Program-controlled electroplating unit. Mekh. i avtom.proizv. 19  
no.1:26-28 Ja '65. (MIRA 18:3)